

AMENDMENTS TO THE SPECIFICATION

Please amend the Abstract as follows:

B1
An alternator testing method and system that provides high resolution signals and stable loads during alternator tests. The method ~~according to the present invention comprises the steps of coupling~~ couples a load to the alternator, and ~~evaluating~~ evaluates the operation of the alternator based on parameters collected only after the load has been coupled to the alternator for a first predetermined period of time. The method may further include a step of detecting the speed of the alternator or motor driving ~~it~~ the alternator. ~~and in one aspect,~~ In one embodiment, the load is applied to the alternator only after motor speed or alternator speed reaches a predetermined level. The load may be automatically decoupled from the alternator after the load has been coupled to the alternator for a second predetermined period of time.

The last paragraph starting from page 4 through page 5, line 5:

B2
Testing system 100 may be a handheld device and may have terminals for receiving an alternator output signal ~~113~~ 215 representative of the alternator output. The alternator output signal may be the electric current generated by the alternator charging battery 123. Alternatively, the alternator output signal ~~113~~ may be a signal from a data processing system representative of the alternator output. The data processing system, for example, may be an on-board vehicle computer or other testing equipment. In another aspect, the alternator output signal ~~113~~ may be a signal generated by a wireless transmission assembly that transmits signals representative of alternator characteristics wirelessly.

The first full paragraph on page 5:

83 Testing system 100 has a microcontroller 101, an analog-to-digital converter 105 and a display 103. Microcontroller 101 processes data and generates control signals. Analog-to-digital converter 105 converts analog signals to digital signals. Display ~~304~~ 103 provides a communication interface with a user and may be an LCD screen, an LED indicator or the like. Microcontroller 101 may control a switch device 121, such as an FET switch, that selectively couples a load 117 to the alternator. As illustrated in Fig. 1, switch device 121 and load 117 are serially connected and then coupled to the alternator in parallel via battery terminals 125. If switch device 121 is on, load 117 is coupled to the alternator; if switch device 121 is off, load 117 is decoupled from the alternator. Other circuit design techniques known to persons skilled in the art can be used for controlling the coupling of the load to the alternator.

The first full paragraph on page 6:

84 Upon the engine speed or the alternator speed reaching a predetermined level, such as 1500 rpm for the engine speed, microcontroller 101 generates a first switch control signal to turn on switch ~~324~~ 121 so that load 117 is coupled to the alternator via battery terminals 125. The alternator is now operating under load.

The last full paragraph on page 7:

85 Fig. 2 shows an example of a control circuit 207 for coupling load 117 to the alternator and a regulation circuit 205 for controlling operation of a fan for purpose of cooling. Control circuit 207 includes a logic IC 206 that receives a control signal from microcontroller 101 and in

85
Don't
response generates a switch control signal 208 to control the ON/OFF of a FET switch 221 ~~121~~, which in turn controls the coupling of load 117 to the alternator.

The last full paragraph on page 8:

86
Fig. 4 shows an example of the cooling arrangement implemented according to the present invention, with part of a housing 400. Housing 400 has a size suitable to be held in one's hand and receives a circuit board 450 having microcontroller 101, detection circuit 109, bandpass filter 113, amplifier 111 and other components. A temperature sensor ~~119~~ 419 is disposed at a location near a Nichrome coil 417 ~~117~~, as the load sensing element. Switch 121, that may be an FET-type switch, is in serial connection with coil 417 ~~117~~. An air inlet 411 is disposed on one side of the housing and a fan 401 is disposed on the other side of the housing, so that a linear channel 413 between air inlet 411 and fan 401 forms an air flow path when fan 401 is in operation. The channel is defined by a wall 410 that isolates the airflow path from the remainders of the housing. The heat generated by coil ~~117~~ 417 will be dissipated to the surrounding air and drawn out from the housing 400 through an outlet established by fan 401 itself, as depicted.
